

# **2018 Haagen-Smit Clean Air Awards**

February 21, 2019

#### Clean Air Awards

Recognize exemplary air pollution and climate change science and policy achievements



### Arie Haagen-Smit, Ph.D.



**Mobile Laboratory** 

- Professor at California Institute of Technology
- Linked Los Angeles smog to automobiles
- "Father" of air pollution control
- CARB's first Chairman in 1968
- Awarded National Medal of Science in 1973



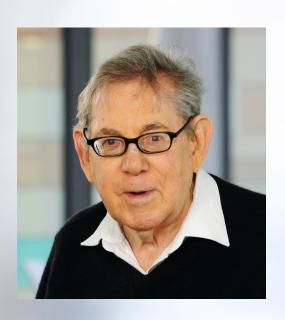
### 2018 Award Recipients



- Paul Crutzen, Ph.D.
- Anne Douglass, Ph.D.
- Hal Harvey
- Barry Wallerstein, D.Env.
- John Watson, Ph.D.



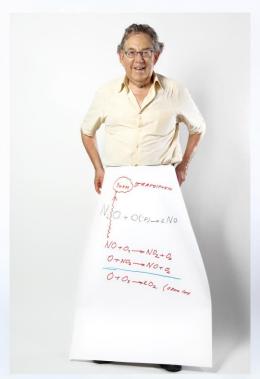
# Paul Crutzen, Ph.D. International Air Pollution Research



- Emeritus, Germany's Max Planck Institute for Chemistry
- Emeritus Professor, Scripps Institution of Oceanography
- Research on ozone-depleting substances spurred global action and the 1987 Montreal Protocol
- Nobel Prize in Chemistry, 1995



#### Paul Crutzen, Ph.D.



Paul Crutzen is part of the exhibition project "Sketches of Science" by Volker Steger



# Anne Douglass, Ph.D. Atmospheric Research



- Atmospheric Scientist, NASA Goddard Space Flight Center
- Project Scientist for Aura Satellite, an Earth Observing System observatory
- Advanced modeling of chemical and climate processes on ozone



### Anne Douglass, Ph.D.



Anne Douglass holding a model of the Aura satellite.



# Hal Harvey Climate Policy



- CEO, Energy Innovations, LLC
- Founded climate-focused philanthropic organizations The Energy Foundation and The ClimateWorks Foundation
- Author, "Designing Climate Solutions: A Policy Guide for Low-Carbon Energy"



### **Hal Harvey**



Climate One event November 2018



### Barry Wallerstein, D.Env. Environmental Policy



- Senior Policy Fellow, UC Riverside
- Executive Officer, South Coast Air Quality Management District 1997-2016
- Leader on Southern California regional air and climate issues



### Barry Wallerstein, D.Env.



U.S. EPA Environmental Awards 2010



# John Watson, Ph.D. Air Pollution Research



- Research Professor, Desert Research Institute
- Adjunct Professor, Institute of Earth Environment, Chinese Academy of Sciences
- Spurred influential innovations and assessment of adverse impacts from air pollution



#### John Watson, Ph.D.



Measuring air pollution damage on China's Terra Cotta Warriors 2006





## Thank you!

arb.ca.gov/hsawards